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Patient Safety Implementation Model at Datoe Binangkang Hospital, Kotamobagu, North Sulawesi (Case Study in the Operating Room)

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Abstract: ***This research is located in Datoe Binangkang Hospital, North Sulawesi. This study aims to develop a model in the management of patient safety at Datoe Binangkang Hospital. As the only hospital in Kotamobagu, Datoe Binangkan Hospital has the opportunity to compete and develop in Kotamobagu as an international standard hospital. The research method used is a descriptive method with a qualitative approach. This study found that the model of the implementation of patient safety that was not maximal which occurred in Datoe Binangkang Hospital was caused by several factors including facilities and infrastructure, teamwork and communication that were not good. The weakness of the previous model is that there is often misinformation and the absence of complaints that occur because of not implementing patient safety properly. The results of this research SWOT analysis show that the discovery of weaknesses and strengths from the interview results in creating a flow for patient implementation that promotes good communication and teamwork. Through training and the clearer communication of incident reporting communication and responsive systems from both management and medical teams, it is expected that the safety of patients in Datoe Binangkang Hospital, especially the surgical room will be better.***

1. Introduction

Implementation of patient safety procedures is important in supporting the success of the hospital in handling patients. Alahmadi (2014) states that the condition of implementing patient safety is considered as important as 60 percent of patients feel satisfied with the procedures performed. Collaborative support from the head of the hospital up to the support of patients and families of patients is a factor that is considered important in supporting the realization of patient safety. Patient safety is an important issue in the world of health, and even concerns the world over the events that occur in the health world As noted at The American Hospital Asossiation (AHA) where it was recorded up to 2000 Non-Expected Events (KTD) still occur quite often during medical actions which amounted to 3-6 percent.

The incidence of patient safety that causes KTD should be reduced to a minimum, this is intended so that incidents that occur due to incorrect procedures for implementing patient safety goals can be minimized. Medical personnel often ignore existing procedures such as some cases that occur in the United States, where there are 100 deaths due to medication errors that cause adverse drug reactions (Tan et al, 2013). The existence of a hospital as a place to support the achievement of a healthy and prosperous society must hold on to important procedures for patient safety goals. Improvements in the quality of health services must be carried out to obtain accreditation, which is a measure of the readiness of hospitals in carrying out medical practices in the purpose of providing health insurance to patients.

One of the actions that are considered high risk is surgery or surgery. Patient safety guarantees are very important in the operating room. Cavoukian (2009) states that the importance of implementing operations in accordance with 19 items that have been given by WHO is considered to be able to reduce communication, increase team communication and reduce the risk of death associated with surgery. WHO revealed that there were three phases in carrying out the operation, namely the induction of anesthesia, before the skin incision, and before the patient left the operating room.

One indication of the frequent occurrence of errors in surgery is the disorderly use of surgical safety checklists in the operating room. Management of hospital services has important duties and functions in the focus of patient safety goals including the functions of planning, organizing, staffing, directing and controlling functions. These functions have their respective roles in supporting the achievement of a good process for patient safety (Swanburg, 2002).

Datoe Binangkang Hospital is the only public hospital in Kotamobagu. This makes the Datoe Binangkang Hospital have an important role and great responsibility in implementing health practices. Based on the initial survey of this study, there are still many medical practices that still have not implemented patient safety goals properly. There is still dissatisfaction because of coordination and communication with patients so that misunderstandings arise. As the only general hospital in Kotamubagu, vital activities regarding surgery are often carried out in Datoe Binangkang Hospital, accreditation which is still in C value is a major obstacle in improving service to the community. Especially from the data obtained the events that occurred in the operating room and in Intansi Intensive Care were still high. Where there were 178 people recorded phlebitis in 2016 and the incidence of patients falling in 2017 was 39 people. This study aims to examine what factors influence

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patient safety in Datoe Binangkang Kotamubagu Hospital, especially in the event and procedure in the operating room.

2. Literature Review

Safety is not only attached to individuals, facilities and infrastructure or only to systems such as departments and units. But safety refers to a broader concept as the interaction of components within the system (Cooper et al, 2000). Patient safety is the basic principle of health care (WHO). Patient safety according to Sunaryo (2009) is that there is no error or is free from injury due to an accident. Patient safety in a hospital is a system where hospitals make patient care safer which includes risk assessment, identification and management of matters related to patient risk reporting and analysis of incidents. The learning ability of incidents and follow-up and implementation of solutions to minimize the occurrence of risks and prevention of the occurrence of injuries caused by errors due to carrying out an action or not taking action that should be taken (Ministry of Health, 2011). Medical errors that often occur in the operating room are potentially injured in patients and have a high risk. Some medical errors that often occur in the operating room include:

1) Unexpected events (KTD) that is where an event that occurs affects the patient and is an unexpected event that occurs in the patient because of an action (commission) or because it does not act (omission) and not because of the patient's condition
2) Almost Injuries (NC) or Near Miss is a condition that occurs because of carrying out an action or not carrying out an action that injures a patient, but a serious injury can occur.

In addition, some potentials often arise and occur in the operating room, including errors in patients who are operated on, errors in surgical procedures, errors in giving blood transfusions, errors in giving drugs and the occurrence of infection or sepsis due to surgery.

Hospital patient safety standards are prepared as a reference for Indonesian hospitals to carry out their activities. This standard refers to the "Hospital Patient Safety Standars" issued by the USA "Joint Commission on Accreditation of Health Organizations", in 2002, and has been adapted to the situation and conditions of hospitals in Indonesia (MOH, 2006). The patient safety standard consists of seven standards, namely:

1) Patient's rights.
2) Educating patients and families.
3) Patient safety and continuity of service.
4) Use of performance improvement methods to conduct evaluation and improvement programs on patient safety.
5) Leadership role in improving patient safety.
6) Educate staff about patient safety.
7) Communication is the key for staff to achieve patient safety.

Patient safety standard

Standard I. Patient rights

The patient and his family have the right to get information about the plan and results of the service including the possibility of an adverse event (KTD).

Criteria:

a) There must be a doctor in charge of service.
b) The doctor in charge of the service must make a service plan.
c) The doctor in charge of services must provide clear and correct explanations to patients and their families about plans and results of services, treatment and procedures for patients including the possibility of KTD / Adverse Events.

Standard II. Educating patients and families

The hospital must educate patients and their families about the patient's obligations and responsibilities in patient care.

Criteri

Patient safety in service delivery can be improved by the involvement of patients who are partners in the service process. Therefore, in the hospital there must be a system and mechanism to educate patients and their families about the obligations and responsibilities of patients in the care of patients. Education is expected by patients and families to:

a) Give information that is true, clear, complete and honest.
b) Knowing the responsibilities and responsibilities of patients and families.
c) Ask questions for things that are not understood.
d) Understand and accept the consequences of service.
e) Comply with instructions and respect hospital regulations.
f) Showing respect and tolerance.
g) Meet agreed financial obligations.

Standard III. Patient safety and continuity of service

a) Hospitals guarantee continuity of services and guarantee coordination between personnel and between service units.
   Criteria:
b) There is overall coordination of services starting from the time the patient enters, checks, diagnosis of service planning, treatment measures, referrals and when the patient is discharged from the hospital.
c) There is coordination of services tailored to the needs of patients and the feasibility of resources on an ongoing basis so that all stages of transaction services between service units can run smoothly.
d) There is service coordination that includes improved communication to facilitate family support, nursing services, social services, consultation and referrals, primary health care and other follow-up.
e) There is communication and transfer of information between health professions so that it can achieve a process of coordination without obstacles, safe and effective.

Standard IV.

Hospitals must design new processes or improve existing processes, monitor and evaluate performance through data collection, intensive analysis of KTD / Adverse Events, and make changes to improve patient performance and safety.

Criteria:

a) Each hospital must carry out a good planning process, referring to the hospital's vision, mission, and goals, the needs of patient health care staff, the latest clinical

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rules, sound business practices and other factors that have the potential to risk patients according to "7 steps towards hospital patient safety "consists of:

1) Build awareness of the value of patient safety
2) Lead and support your staff
3) Integrate risk management activities
4) Develop a reporting system
5) Involve and communicate with patients
6) Learn and communicate with patients
7) Learn and share experiences about patient safety
8) Prevent injury through the implementation of a patient safety system

b) Each hospital must collect performance data, among others, related to incident reporting, accreditation, risk management, utilization, service quality, finance.
c) Each hospital must conduct intensive evaluations related to all KTD (Adverse Events)/KNC (Near miss), and proactively evaluate a high-risk case process.
d) Every hospital must use all data and information from the analysis to determine the system changes needed, so that the patient's performance and safety are guaranteed.

Standard V. Leadership role in improving patient safety

a) The leadership encourages and guarantees the implementation of patient safety programs in an integrated manner in the organization through the application of "7 steps towards hospital patient safety".
b) The leadership guarantees a proactive program to identify patient safety risks and programs to reduce or reduce Adverse Events (KNC) (Near miss).
c) The leadership encourages and fosters communication and coordination between units and individuals relating to decision making about patient safety.
d) The leadership allocates strong resources to measure, assess and improve the performance of raft houses and improve patient safety.
e) The leader measures and reviews the effectiveness of his contribution in improving hospital performance and patient safety.

Criteria:

a) There is an interdisciplinary team to manage patient safety programs.
b) Proactive programs are available for safety risk identification and incident minimization programs, which cover types of events that require attention, ranging from KNC / Near miss to KTD / Adverse events.
c) A working mechanism is available to ensure that all components of the hospital are integrated and participate in patient safety programs.
d) There are "quick response" procedures for incidents, including care for affected patients, limiting risk to others and delivering correct information and analysis for purposes of analysis.
e) Available internal and external reporting mechanisms relating to incidents include providing correct and clear information about root cause analysis of Root Cause Analysis (RCA) events when patient safety programs are implemented.
f) Mechanisms for dealing with various types of incidents or proactive activities are available to minimize risks, including mechanisms to support staff in relation to events.
g) There is open collaboration and open communication between units and between service managers within the Hospital with an interdisciplinary approach.
h) Available resources and information systems are needed in hospital performance improvement activities and patient safety improvements, including periodic evaluations of the adequacy of these resources.
i) Measured targets and information collection are available using objective criteria to evaluate the effectiveness of improving hospital performance and patient safety, including planned follow-up and implementation.

Standard VI. Educate staff about patient safety

a) The hospital has a process of education, training and orientation for each position including clearly defined positions with patient safety.
b) The organization organizes ongoing education and training programs to improve and maintain staff competency and support the interdisciplinary approach in patient care.

Criteria:

a) Each hospital must have an education, training and orientation program for new staff that includes topics on safety in accordance with their respective duties.
b) Each hospital must integrate the topic of patient safety in each service inservice activity and provide clear guidance on incident reporting.
c) Each hospital must conduct training on group collaboration to support interdisciplinary and collaborative approaches in order to serve patients.

Standard VII. Communication is the key for staff to achieve patient safety

a) The organization plans and designs patient safety information management processes to meet internal and external information needs
b) Data and information transmission must be timely and accurate.

Criteria:

a) A budget is needed to plan and design the management process to obtain data and information about matters related to patient safety.
b) A problem identification mechanism and communication constraints are available to revise existing information management.

3. Methodology

This study uses a descriptive qualitative approach. Qualitative research is research that produces descriptive data in the form of words or oral. Moleong (2007) reveals that in descriptive research the emphasis is on words, images and not numbers due to the application of quantitative methods.

4. Results and Discussion

The importance of preparing the right steps in creating good conditions in the development of Datoe Binangkan General Hospital, especially in creating good management in creating patient safety in accordance with the conditions of

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the community and the environment around the hospital. Based on the SWOT matrix, it can clearly illustrate how Datoe Binangkan Hospital in developing in a better direction.

Table 1: SWOT Analysis Matrix of Datoe Binangkang Hospital

Strength (S)	Weakness (W)
1) Datoe Binangkang Hospital is the only public hospital in Kotamobagu. 2) There is full support from the regional government in developing the Datoe Binangkang Regional Hospital in the future.	1) Patient management is still not optimal, including in the operating room. 2) There is still no maximum service for BPJS patients. 3) There are buildings that are still under construction and the form and design of the Datoe Binangkang Regional Hospital are still not permanent. 4) The limited infrastructure facilities, especially the surgical room, and the lack of surgical room medical staff
Opportunity (O)	**Threat (T)**
As the only regional general hospital in Kotamobagu, Datoe Binangkang Hospital has a great opportunity in self-development and collaborating with the local government and BPJS.	The weakness of the organizational system, the poor management of patient safety and the competition with private hospitals around the area around Datoe Binangkan Hospital are not good.
SO strategy	**WO Strategy**
1) Collaborating with relevant agencies and increasing relations with the community. 2) Expanding market share by promoting.	1) Designing an SOP especially surgery to improve patient safety management in the operating room. 2) Perform building repairs and repair of infrastructure. 3) Prepare a surgical room that meets international hospital standards. 4) Perform self-improvement to improve hospital accreditation.
ST strategy	**WT Strategy**
1) Increasing the number of doctors and nurses, especially specialists in accordance with their fields. 2) Complete the availability of medical devices, especially the surgical room. 3) Establish target markets and improve service quality.	1) Prioritizing training and workshops to improve the understanding of the organization and management of patient equipment. 2) Making SOP for the operating room that is in accordance with the condition of the RSUD 3) Improve work discipline of all medical personnel and improve the quality of the resources of Datoe Binangkang Hospital.

Source: Data (2018)

Based on the results of SWOT analysis, it was found that the strength used as the supporting factor was broadly compared to the weakness factor. So that Datoe Binangkang Hospital must be able to compete with other hospitals around it. To support the success of patient safety in Datoe Binangkang General Hospital, adequate policies are needed for activities in the surgical room supported by improved infrastructure and individual quality.

5. Conclusions

The conclusions of this study are: 1) The model for developing patient safety in the operating room at Datoe Binangkang Hospital must be in accordance with the conditions in the field adjusted to the characteristics of the surrounding community who are patients in Datoe Binangkang Hospital, 2) Based on the SWOT analysis to be able to make SOP money according to good implementation, there needs to be various trainings and workshops in developing management of patient safety in the operating room.

6. Suggestions

The hospital must update and keep up to date on the application of Surgical Safety Checklist as an important factor in supporting the successful implementation of patient safety in the operating room. Training and providing learning opportunities for medical personnel to be able to implement science well and improve the facilities available in hospitals, especially the operating room. Good communication and team collaboration are also needed in developing and promoting the safety model of new patients.

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